

ABSTRACT OF THE DISCLOSURE

An optical transmitter for use in an optical transmitting system based on PDS (Passive Double Star) technology, does not erroneously output an optical signal when the optical transmitter is powered on/off. The optical transmitter has a current source 1 for outputting a drive current having a magnitude corresponding to an input control signal, a Laser diode (LD) for generating an optical output signal based on the received drive current, a modulator 9 for controlling the supply and cutoff of the drive current to the Laser diode (LD), a source voltage detector 3 for monitoring a source voltage to detect whether the source voltage is lower than a predetermined voltage, and a switch circuit 4 for outputting a control signal to the current source 1 to stop the supply of the drive current when the source voltage is determined to be lower than the predetermined voltage.